Using Nexus-II with TheSky X

This document describes how to setup your Nexus-II with your computer running TheSky X using default factory settings.

1. Please go to Wi-Fi on your computer. You will see 'NexusII_XXXXX there (where XXXXX is the serial number of your Nexus-II found on the back of Nexus-II), select it.

Nexus-II will be connected in a few moments.

2. Run TheSky X, go to 'Telescope -> Telescope Setup'.

😑 🔿 🐱 Imagi	ng System Setup - ImagingSystem
Hardware Selection Devices Mount <no mount="" selected=""></no>	Mount: <no mount="" selected=""> Mount Setup < Status: Not Connected Preferences</no>
	Always confirm siews Always confirm syncs Confirm pointing samples Atmospheric Refraction Pa
	Cross <u>h</u> air update interval: As fast as Always keep telescope cross hairs visible on Sky Chart: Yes Log current telescope position to: User/Telescope Position.txt
	Description: <none> Choos</none>
Imaging System Profiles New Profile Save Profile <u>A</u> s	

Click on 'Mount Setup' and select 'Choose...':





Select Ouranos:



The following screen will be shown:

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Hardware Selection Devices Mount Ouranos		Mount	t: Ouranos s: Not Connecto	ad .	Mount Setup -		
		Hardw	are and Driver II	ntormation			
		Dev	rice name:	Software- Guided	Driver version: Firmware versio	1.00 in:	
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Imaging System Profiles					Atmosp	heric Re <u>f</u> raction	
New Profile	Open Profile		Cross <u>h</u> air upda	te interval:		As fast	
Save Profile <u>A</u> s						Close	

Then click on 'Mount Setup' and select 'Settings...':

	SGT S	Settings			
Serial Port:			C <u>h</u>	oose	
Encoders					
Tics/revolution (RA,Az):	2048	3			\$
Tics/revolution (Dec, Alt):	2048	3			\$
<u>Communications Box Sett</u>	ings a	and Encode	r Settings	Differ	
Tics/ <u>r</u> evolution (RA	Az):	2048			¢
Tics/revolution (Dec,	Alt):	2048			\$
<u>P</u> oint to declina	tion:	90.00°			¢
Azimuth Direction		Altitude Dir	ection		
Cloc <u>k</u> wise		Clock	<u>w</u> ise		
Counterclockwise		Count	terc <u>l</u> ockw	vise	
Telescope Database					
CUSTOM					-
S <u>e</u> t Encoder Tics		Con	figure De <u>r</u>	vice	
				Close	e



Now click on 'Choose...' button in the upper right corner:



Change 'Serial device' to 'TCP/IP'

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Serial device:	TCP/IP	•
TCP/IP <u>h</u> ost:	<enter address="" ip=""></enter>	
	Cancel	ОК

And set 'TCP/IP host' to 10.0.0.1 and 'TCP/IP port' to 4060:

	Serial Device Settings	
Serial device:	TCP/IP	•
TCP/IP <u>h</u> ost: TCP/IP <u>p</u> ort:	10.0.0.1 4060	
	Cancel	ж



You now need to change encoder tics fields to correspond to the real resolution of encoders installed on your telescope. Here is an example when the encoders installed on the telescope are 311,296 steps/tics per revolution on both the azimuth and the altitude.

	SGT S	Settings			
Serial Port: TCP/II Encoders	P		(C <u>h</u> oose	
Tics/revolution (RA,Az):	3112	96			¢
Tics/revolution (Dec, Alt):	3112	96			¢
<u>Communications Box Sett</u>	ings a	and Encode	r Settin	gs Differ	
Tics/ <u>r</u> evolution (RA	.,Az):	311296			¢
Tics/revolution (Dec,	Alt):	311296			-
Point to declination	tion:	90.00°			¢
Azimuth Direction		Altitude Dir	ection		
Clockwise		Clock	<u>w</u> ise		
Counterclockwise			terc <u>l</u> oc	kwise	
Telescope Database					
CUSTOM					
S <u>e</u> t Encoder Tics		Con	figure [De <u>v</u> ice	
				Clos	e

The setup is now complete.

However you may need to adjust either 'Azimuth Direction' or 'Altitude Direction' or both – you will see which one(s) will have to be changed when you connect to Nexus-II in the following steps.

3. Now click on 'Telescope' tab on the left panel of the main window.

Computer Clock	01:30:18 pm June/02/2018	→ → → → → Ix (realtime) →
elescope Chart Elements Photos Labels	lescope Ouranos Mount Setup Start Up Tools Shut Down Itatus: Tel Connected Point Scatter Plot	
doosalaT Chart S	Status Date: 2/06/2018 Time: 1:30 PM STD	



And click on 'Start Up->Connect Telescope' and you will see a telescope cursor in the main part of the window:



Now it is a good idea to move the telescope and check that the telescope cursor's movements correspond to the telescope's movements. If movements differ then you need to review the settings for 'Azimuth Direction' or 'Altitude Direction' described in the previous section of this guide.

4. Now you are ready to perform a two star alignment. Please select the 'SGT' tab in the left panel:





Now click on 'Start Alignment Procedure', then position the telescope in accordance with 'Point telescope at':

omputer Clock	ock 01:31:06 pm June/02/2018 C Backward Stop Backward Stop Step Forward Go Forward Tx (realtime) -	
N I	£ sστ σ×	
ents adose	Align Utilities	
hart Elem	Step 1: Point the telescope at 90.0° altitude if your telescope uses an az/alt mounting (or 90.0° declination if your telescope uses an equatorial mounting).	
	For a Dobsonian telescope, the telescope should be pointed straight up (at the zenith).	
escope	adocse	
	E Step 1	
ng List	Point telescope at: 90.0°	
Observi	Next Next	
Cha	Chart Status	
	Date: 2/06/2018	

Click on the 'Next >>' button, select the alignment star (here Rigel is selected), point the telescope at the star selected:





Click on the 'Next >>' button when the star is precisely in the centre of the eyepiece. Now select the second alignment star (here Canopus is selected).



Click on the 'Next >>' button when the star is precisely in the centre of the eyepiece. Check the alignment status and if everything is correct then click on 'Accept Alignment':





Now The Sky X will report that the telescope is aligned and ready to use:



Now you can select an object and go to 'Utilities' in the SGT tab and click on 'Guide To Current Object':



Please refer to the User Manual of The Sky X for further information.

Enjoy!

